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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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207 7590 11/02/2006				
WEINGARTEN, SCHURGIN, GAGNEBIN & LEOVICI LLP				
TEN POST OFFICE SQUARE				
BOSTON, MA 02109				
			EXAMINER	
			JOHNSON, EDWARD M	
		ART UNIT	PAPER NUMBER	
		1754		

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/830,907

Applicant(s)

BAYENSE ET AL.

Examiner

Edward M. Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-16 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-16 and 20-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-8, 10-16, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulaskey et al. US 3,673,079 in view of Neel et al. US 4,554,268.

Regarding claims 1 and 24, Mulaskey '079 discloses alumina extrudate rods (see column 4, lines 65-75), having a star shape (see column 5, lines 26-32), a side crushing strength of at least 30 pounds (see column 5, line 46 and column 14, line 68), less than 10% pores above 1000 Angstroms (see column 5, lines 57-59) and a pore volume of 0.25-0.4 cc/g (see column 5, lines 53-54), which would obviously, to one of ordinary skill, at least suggest 0.05 ml/g of pore volume in pores of diameter over 1000 nm, when the amount of total alumina, and thus total pore volume, is greater (no particular total pore volume is claimed).

Mulaskey '079 fails to disclose a bulk crushing strength of at least 1 MPa.

Neel '268 discloses a bulk crushing strength of 1-4 MPa.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the 1-4 MPa bulk crushing strength of Neel in the alumina extrudate catalyst support of Mulaskey because Neel discloses his bulk crushing strength for use in an alumina catalyst support (abstract) which crushing strength is advantageous when used in a bed that has a substantial height or when a second layer of catalyst particles is placed upon the catalyst bed (see column 2, lines 14-19).

Regarding the newly added recitation, Mulaskey '079 discloses less than 10% of pores above 1000 Angstroms (see column 5, lines 57-59) and a pore volume of 0.25-0.4 cc/g (see column 5, lines 53-54), and Neel discloses a pore volume of at least 0.5 ml/g (see column 2, lines 3-6), a surface area above 300 m<sup>2</sup>/g, either or both of which would obviously, to one of ordinary skill, at least suggest 10% of pore volume in pores of diameter over 1000 nm.

Regarding claim 2, Mulaskey '079 discloses a length of about 0.2 inches (see column 11, line 43).

Regarding claims 3 and 10, Mulaskey '079 discloses a length to diameter ratio of 1-3 (see column 14, lines 63-64).

Regarding claims 4-5, 11, and 20-23 Neel '268 discloses a pore volume of at least 0.5 ml/g (see column 2, lines 3-6), a surface area above 300 m<sup>2</sup>/g, and less than 6% attrition resistance (see column 5, lines 46-49).

Regarding claims 7 and 12-16, Mulaskey '079 discloses catalysts (see abstract).

Regarding claim 8, Mulaskey '079 metal oxide catalyzers (see paragraph bridging columns 5-6).

***Response to Arguments***

4. Applicant's arguments filed 9/5/06 have been fully considered but they are not persuasive.

The rejection under 35 USC §112(1) has been withdrawn in view of Applicant's amendment.

It is argued that Mulaskey teaches away from Applicant's invention as claimed. This is not persuasive because Applicant appears to admit that the instantly claimed percentage ranges read on the disclosed prior art range of less than 10% and also because one of ordinary skill in the art would expect a disclosed workable range of less than 10% to at least include a range of acceptable values at least including 10% itself.

It is argued that by straightforward computation, 10 percent... above 1000 Angstrom units. This is not persuasive because Applicant cites the 0.4 cc/g while not claiming, in

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claim 1, any particular total pore value at all. Thus, Applicant's argument is not commensurate in scope with the claim. Specifically, with respect to claim 1, the claimed 0.05 ml/g may represent greater or less than 10% of the total pore volume, since no particular total pore volume is claimed. Claims must be given their broadest reasonable interpretation. In re Morris, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997).

It is argued that as clearly disclosed in Applicant's specification... improvement in industrial utility. This is not persuasive because Applicant does not claim a particular "total pore volume", of which 0.05 ml/g represents a fraction greater than 10%. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a particular "total pore volume", of which 0.05 ml/g represents a fraction greater than 10%) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS**

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**ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Edward M. Johnson  
Primary Examiner  
Art Unit 1754

EMJ